

# **Computing for Human Services**

**Chief Editor**

**Shihab Ahmed Hameed**

*Electrical and Computer Engineering-IIUM University*

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**IIUM Press**

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## Book Contents

Chapter No	Chapter Title, Author(s)	Page No
	Book Contents	v
	Preface	ix

### Part I Computing to Serve Educational Aspects

<b>Chapter 1</b>	Status of Higher Education in Developing and Islamic World, <i>Shihab A. Hameed</i>	3
<b>Chapter 2</b>	Planning the Future of Higher Education in Developing and Islamic World, <i>Shihab A. Hameed</i>	13
<b>Chapter 3</b>	Internet Impact on Education, <i>Shihab A. Hameed</i>	21
<b>Chapter 4</b>	Eliminating Internet Weakness in Education, <i>Shihab A. Hameed</i>	29
<b>Chapter 5</b>	Computing Role in Educating Deaf Children, <i>Haidawati Mohamad Nasir, Othman Omran Khalifa, Shihab A. Hameed</i>	37
<b>Chapter 6</b>	Management of Research and Development in Educational Organizations, <i>Rashid A. Saeed, Othman O. Khalifa, Aisha Hassan, Shihab A. Hameed</i>	43
<b>Chapter 7</b>	Computer Implementable Quick Fourier Transform (QFT) for Engineering Educators <i>Abdulfattah A. Aboaba, Shihab A. Hameed, Othman O. Khalifa, Aisha H. Abdalla, Ado Dan-Isa, Jubril D. Jiya., James Katende, Abdulfattah B. Mustapha, &amp; Abdullahi L. Amoo</i>	53
<b>Chapter 8</b>	Virtual-Learning Content Management System Using Problem-Based Learning (PBL), <i>Norul Ashikin Bt Abu Kasim, Teddy Surya Gunawan</i>	63
<b>Chapter 9</b>	Development of Final Year Project Portal for Engineering Program, <i>Teddy Surya Gunawan, Abdul Mutholib, Mira Kartiwi</i>	71

## Part II

### Computing to Serve Ethical, Social, and Environmental Aspects

<b>Chapter 10</b>	Software Engineering and Ethical Values, <i>Shihab A. Hameed</i>	83
<b>Chapter 11</b>	New Model for Software Engineering Ethical Principles <i>Shihab A. Hameed</i>	91
<b>Chapter 12</b>	Hajj and Information Technologies: Analytical Study, <i>Shihab A. Hameed</i>	101
<b>Chapter 13</b>	Framework for Comprehensive Hajj Model with ICT, <i>Shihab A. Hameed</i>	109
<b>Chapter 14</b>	RFID for Hajj Identification Guide Information and Personnel Announcement, <i>Dzul I'zzat Bin Julaihi, Ahmad F. Abdul Rahman, Othman O. Khalifa</i>	121
<b>Chapter 15</b>	Development of Online Application for Muslim Traveler with UML Diagram, <i>Teddy Surya Gunawan, Afif Abul Fattah Che Omar, Shihab A. Hameed, Mira Kertiwi</i>	133
<b>Chapter 16</b>	Computers and Electronic Devices Waste: Fundamental Facts <i>Shihab A. Hameed</i>	139
<b>Chapter 17</b>	Computers and Electronic Devices Waste: Analysis and Solution, <i>Shihab A. Hameed</i>	149
<b>Chapter 18</b>	ICT and Environmental Problem, <i>Shihab A. Hameed</i>	157
<b>Chapter 19</b>	Strategy for Green ICT: An Islamic View, <i>Shihab A. Hameed</i>	165

## Part III

### Computing to Serve Healthcare and Medical Aspects

<b>Chapter 20</b>	Fundamental to Medical Data Centre, <i>Shihab A. Hameed, Waleed A. Badurik</i>	175
<b>Chapter 21</b>	Network Based Telemedicine for Fetal ECG Monitoring, <i>M. I. Ibrahimy, S. M. A. Motakabber</i>	185
<b>Chapter 22</b>	Electronic Patient Medical Record to facilitate Patient Monitoring, <i>Shihab A. Hameed, Shazana Mustafa, Aina Mardhiyah, Vladimer Miho, Aisha Hassan</i>	195

<b>Chapter 23</b>	Developing EPMR to Serve Effective Patient Monitoring Database, <i>Shihab A. Hameed, Shazana Mustafa, Aina Mardhiyah, Vladimer Miho</i>	203
<b>Chapter 24</b>	Interactive Web-Based Model for Medical Emergency, <i>Shihab A. Hameed, Shahina shabnam, Nur hafizah Chek Nuh , Nur Huda Bt Salim</i>	209
<b>Chapter 25</b>	Mobile Web Model to Serve Healthcare, <i>Shihab A. Hameed, Vladimer Miho</i>	221
<b>Chapter 26</b>	SMS to Facilitate Healthcare and Emergency, <i>Shihab A. Hameed, Shahina Shabnam Bt Mohd Sharifudeen, Nur hafizah Chek Nuh , Nur Huda Bt Salim, Aisha Hassan, Othman Khalifa</i>	229

#### **Part IV**

#### **Computing to Serve Security and Privacy Aspects**

<b>Chapter 27</b>	Wireless Technology to Secure Emergency and Guidance, <i>Shihab A. Hameed, B. A. Aliyu</i>	237
<b>Chapter 28</b>	Authentication Enhancement for Medical Data Centers, <i>Shihab A. Hameed, Waleed A. Badurik</i>	245
<b>Chapter 29</b>	Integrated Authentication Model: Face Verification, <i>Shihab A. Hameed, Waleed A. Badurik</i>	255
<b>Chapter 30</b>	Confidentiality to Service Medical Emergency Model, <i>Shihab A. Hameed, Habib Yuchoh, Wajdi F. Al-Khateeb</i>	261
<b>Chapter 31</b>	Fundamental to Password based security <i>Shihab A. Hameed, Ahmed Fathi Zainazlan, Herman Sazwan nor rahim</i>	269
<b>Chapter 32</b>	Graphical Password Security Model, <i>Shihab A. Hameed, Ahmed Fathi Zainazlan, Herman Sazwan nor rahim</i>	277
<b>Chapter 33</b>	Automobile Monitoring and Tracking, <i>Shihab A. Hameed, Othman Khalifa, Aisha Hassan</i>	287

**Part V**  
**Computing to Serve Industrial and other Aspects**

<b>Chapter 34</b>	Speech to Text to Sign Language, <i>Khalid Khalil Kamil, Othman O. Khalifa</i>	297
<b>Chapter 35</b>	Speech to Sign Language Interpreter System (SSLIS), <i>Khalid Khalil El-Darymli, Othman O. Khalifa and Hassan Enemosah</i>	313
<b>Chapter 36</b>	Speech Codec for a Voice over IP (VoIP) Systems, <i>Othman O. Khalifa, Shihab A. Hameed</i>	323
<b>Chapter 37</b>	Reconfigurable Platform in Embedded System, <i>Amelia Wong Azman</i>	329
<b>Chapter 38</b>	Smart Grid Communication Layer, <i>Norulhuda Lokeman, Norizan Mohd Hassan, Sigit PW Jarot</i>	337

## Chapter 26

### SMS to Facilitate Healthcare and Emergency

Shihab A. Hameed, Shahina Shabnam Bt Mohd Sharifudeen, Nur hafizah Chek Nuh , Nur Huda Bt Salim, Aisha Hassan, Othman O. Khalifa  
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#### 26.1. Introduction

This chapter is a complementary part for the previous one. It mainly focusing on using SMS to facilitate the medical emergency model that we explained previously.

#### 26.2. SMS Module

One of the main facilities of the mobility is the using of SMS and MMS. In this paper we will focus on using the SMS facility within IHMEM. SMS module provides three main features: locate nearest healthcare center, healthcare center search and SMS broadcasting. Non-functional requirements related to this module include the following:

- The features of this module must be available only to devices that can send or receive SMS messages
- No authentication is required for:
  - o locating nearest health care center requests
  - o health care center search requests
  - o SMS user registration for SMS broadcast feature

SMS module consists of two actors and three use cases. User initiates 'locate nearest health care center' and 'health care center search' use cases, while staff initiates 'SMS broadcast' use case.

#### 26.3. Locate Nearest Healthcare Center by SMS

Locating the nearest health care center by using SMS is an essential feature of the system. This feature comes in handy when a patient is in need of medical attention but is not aware of the nearest health care center. Responsibilities of this module unit include:

- Handling receiving of SMS requests for nearest healthcare center
- Locating nearest healthcare center based on the provided input